

<p>87-007484/02 D25 E12 (E34) CIBA 09.04.84 CIBA GEIGY AG *CH 659-082-A 09.04.84-CH-001780 (31.12.86) C11d-03/60 07/04 Additive for washing powder comprises readily dissolved speckles - comprising bleaching agent or activator, carbonate and solid acid C87-003014</p>	<p>D(11-B, 11-D2) E(5-S, 7-A2B, 10-A4B, 10-A13B, 10-C2, 10- C4D4, 23-A2, 31-E, 33-D)</p> <p>The speckles dissolve/disperse easily in the wash liquor and the CO<sub>2</sub> gas tends to keep the speckles away from the fabric being washed.</p> <p><b>PREFERRED MATERIALS</b> (1) is a perborate, percarbonate, persulphate, persilicate, per (poly)phosphate, urea peroxide or organic peracids (or their salts or anhydrides); or is a photoactivator, acting as a photo-bleaching agent, esp. a water-soluble phthalocyanine of formula:</p> <div data-bbox="852 346 1047 430" data-label="Chemical-Block"> <math display="block">\text{(MPc)} \begin{cases} \text{R}_x \\ \text{(SO}_2\text{Y)}_v \end{cases}</math> </div> <p>MPc = Zn or Al phthalocyanine residue; Y = H, alkali metal or NH<sub>4</sub>; v = 1-4; R = F, Cl, Br or I, pref. Cl; x = 0-8. Component (2) is NaHCO<sub>3</sub> or Na<sub>2</sub>CO<sub>3</sub>.</p> <p>CH-659082-A+</p>
<p>Washing powder additive (A), in the form of speckles, comprises: (1) at least one bleaching/spot removing agent and/or cpds. which improve the activity of such agents, (2) at least one water-soluble inorganic carbonate and (3) at least one acid or acid salt which is solid at room temp. The compsn. may opt. include: (4) cpds. which maintain the speckles on or near the surface of the washing bath, and (5) surfactant in form of soap. Pref. washing powders contain 0.2-50 wt.% (A). <b>USE/ADVANTAGE</b> (A) are simple and universally applicable. By incorporating component (1) with a CO<sub>2</sub>-generating couple, deposition of speckles on the fabric is avoided, eliminating problems of uneven distribution of (1).</p>	

Component (3) includes ascorbic, adipic, succinic, maleic, phthalic, lactic or esp. citric or malonic acids.

#### FORMULATIONS

Pref. washing powders contain 1-20% speckles, 10-50% surfactant and 0-80% alkali builder plus other usual components

#### EXAMPLE

50 pts. (by wt.) Na percarbonate, 35 pts. NaHCO<sub>3</sub> and 15 pts. citric acid were blended (opt. in presence of a trace of nonionic surfactant), extruded, sieved and dried to give particles of size 1.5 mm.

The product was incorporated (at 20%) into a washing powder and this tested for cotton fabric dyed with C.I. 36250. No adverse effects on the colour was observed. When speckles contg. Na percarbonate and Na<sub>2</sub>SO<sub>4</sub> were used instead, visible local bleaching of the dye occurred. (9pp1251DAHDwgNo0/0).

CH-659082-A

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